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Sir:

IN THE SPECIFICATION:

--This application is a divisional of U.S. Serial No. 09/094,590, filed June 15, 1998, which is hereby incorporated by reference, in its entirety and for all purposes.--

An eighth aspect of the present invention provides a decoding apparatus for a digital video disc which stores a digital data stream obtained by A/D converting audio analog signals of at least one musical composition, a program for reproducing one of musical composition groups, and an approved interactive data required when a user

accesses a specific musical composition group. The decoding apparatus comprises an input means for receiving an arbitrary interactive data entered by the user accessing the specific musical composition group, and a reproducing means for reproducing the specific musical composition group only when the entered interactive data agrees with the approved interactive data.

Page 10, first paragraph:

On the other hand, as shown in Fig. 6B, each ACBS area includes a plurality of ACB areas each corresponding to one album of audio. Each ACB (i.e., one album) area consists of a plurality of tracks. The track includes PTA (i.e., part of album). Each track consists of a plurality of indexes corresponding to the cells of the chapter. Each index consists of a plurality of ACBU (i.e., ACB unit). Each ACBU consists of a plurality of packs. Each pack is 2,048 bytes. Each ACBU comprises an A-CONT (i.e., audio control) pack positioned at a head thereof. This A-CONT is a counterpart of the CONT pack of the VCBU. A plurality of A (i.e., audio) packs, as well as V (i.e., video) and SP (i.e., sub picture) packs if necessary, succeed the A-CONT pack. Fig. 7 shows a detailed arrangement of the ACBU. The A-CONT pack includes administration information, such as TOC (i.e., table of contents) information, for administration of audio signals of the succeeding "A" packs. The user data area of each "A" pack stores various audio data including original musical compositions as well as the bonus information or group information, such as taped accompaniments and BGM sounds.

IN THE TITLE:

Please amend the title to read --ENCODING APPARATUS AND DECODING APPARATUS FOR A DIGITAL VIDEO DISC--.

IN THE CLAIMS:

Kindly amend the claims as follows:

1. (Amended) A method for recording and reproducing audio-related data to or from a digital video disc, comprising the steps of:

transmitting at least one primary musical composition via a digital video disc, together with bonus information comprising secondary musical composition and an approved interactive data required when a user accesses said bonus information;

receiving an arbitrary interactive data entered by the user accessing said bonus information; and

reproducing the transmitted primary musical composition regardless of said entered interactive data, and allowing a reproduction of said bonus information including said secondary musical composition only when said entered interactive data agrees with said approved interactive data.

2. (Amended) The recording and reproducing method in accordance with claim 1, wherein said primary musical composition is a main source to be recorded on or reproduced from the digital video disc, and at least one optional source is selectable from the group consisting of taped accompaniments, BGM sounds, MIDI codes, and inquiries.

6. (Amended) An encoding apparatus for a digital video disc comprising:
an A/D conversion means for converting audio analog signals of at least one primary musical composition into a digital form and producing a digital data stream;
and

a recording means for recording said digital data stream on a digital video disc together with bonus information comprising a secondary musical composition and an approved interactive data required when a user accesses said bonus information.

7. (Amended) The encoding apparatus in accordance with claim 6, wherein said primary musical composition is a main source to be recorded on the digital video disc, and at least one optional source is selectable from the group consisting of taped accompaniments, BGM sounds, MIDI codes, and inquiry.

16. (Amended) A decoding apparatus for a digital video disc which stores a digital data stream obtained by A/D converting audio analog signals of at least one primary musical composition, bonus information comprising a secondary musical composition, and an approved interactive data required when a user accesses said bonus information, said decoding apparatus comprising:

an input means for receiving an arbitrary interactive data entered by the user accessing said bonus information; and

a reproducing means for reproducing said primary musical composition regardless of said entered interactive data, and allowing a reproduction of said bonus information including said secondary musical composition only when said entered interactive data agrees with said approved interactive data.

17. (Amended) The decoding apparatus in accordance with claim 16, wherein said primary musical composition is a main source to be reproduced from the digital video disc, and at least one optional source is selectable from the group consisting of taped accompaniments, BGM sounds, MIDI codes, and inquiries.

21. (Amended) A method for recording and reproducing audio-related data to and from a digital video disc comprising the steps of:

transmitting at least one musical composition via a digital video disc, together with reproduction control data for selectively reproducing one of musical composition groups and an approved interactive data required when a user accesses a specific musical composition group;

receiving an arbitrary interactive data entered by the user accessing said specific musical composition group; and

allowing a reproduction of said specific musical composition group only when said entered interactive data agrees with said approved interactive data.

25. (Amended) An encoding apparatus for a digital video disc comprising:

an A/D converter for converting audio analog signals of at least one primary musical composition into a digital form by sampling said audio analog signals at a predetermined sampling frequency and producing a digital data stream;

a signal processing circuit for processing said digital data stream to produce a user data pack;

an encoding circuit for receiving said user data pack together with bonus information comprising a secondary musical composition and an approved interactive data required when a user accesses said bonus information, and producing audio and video data; and

a modulating circuit for modulating said audio and video data according to a modulation procedure suitable for the type of a digital video disc on which said audio and video data are recorded.

26. (Amended) The encoding apparatus in accordance with claim 25, wherein said encoding circuit produces packing data of said primary musical composition as a main source to be recorded on said digital video disc, as well as packing data of at least one optional source selected from the group consisting of taped accompaniments, BGM sounds, MIDI codes, and inquiries.

27. (Amended) The encoding apparatus in accordance with claim 25, wherein said bonus information comprises a program for reproducing one of musical

composition groups and said approved interactive data is required when the user accesses a specific musical composition group.

31. (Amended) A decoding apparatus for a digital video disc which stores a digital data stream obtained by A/D converting audio analog signals of at least one primary musical composition, bonus information comprising a secondary musical composition, and an approved interactive data required when a user accesses said bonus information, said decoding apparatus comprising:

a judging means for judging whether or not an arbitrary interactive data entered by the user agrees with said approved interactive data;

a modulation circuit for demodulating received signals in compliance with a demodulation procedure suitable for the digital video disc;

a decoding circuit for separating said demodulated signal into audio and video packing data of said primary musical composition and said bonus information;

a reproduction control means for reproducing audio and video data of said primary musical composition from said decoding circuit regardless of said entered interactive data and for allowing a reproduction of said bonus information including said secondary musical composition in response to a judgement result of said judging means only when said entered interactive data agrees with said approved interactive data.

32. (Amended) The decoding apparatus in accordance with claim 31, wherein said decoding circuit produces packing data of said primary musical composition as a main source to be reproduced from said digital video disc, as well as packing data of at least one optional source selected from the group consisting of taped accompaniments, BGM sounds, MDI codes, and inquiries.

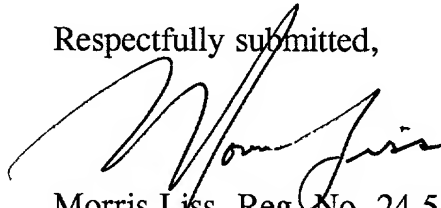
33. (Amended) The decoding apparatus in accordance with claim 31, wherein said bonus information comprises one of musical composition groups and said approved interactive data is required when the user accesses a specific musical composition group.

REMARKS

The claims have been amended to eliminate multiple dependency and to improve their format. None of these amendments is believed to involve any new matter.

Accordingly, it is respectfully requested that the foregoing amendments be entered, that the application as so amended receive an examination on the merits, and that the claims as now presented receive an early allowance.

Respectfully submitted,



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MARKED-UP REVISIONS

IN THE SPECIFICATION:

Page 3, fourth paragraph:

An eighth aspect of the present invention provides a decoding apparatus for a digital video disc which stores a digital data stream obtained by A/D converting audio analog signals of at least one musical composition, a program for reproducing one of musical composition groups, and an approved interactive data required when a user accesses a specific musical composition group[.]. The decoding apparatus comprises an input means for receiving an arbitrary interactive data entered by the user accessing the specific musical composition group, and a reproducing means for reproducing the specific musical composition group only when the entered interactive data agrees with the approved interactive data.

Page 10, first paragraph:

On the other hand, as shown in Fig. 6B, each ACBS area includes a plurality of ACB areas each corresponding to one album of audio. Each ACB (i.e., one album) area consists of a plurality of tracks. The track includes PTA (i.e., part of album). Each track consists of a plurality of indexes corresponding to the cells of the chapter. Each index consists of a plurality of ACBU (i.e., ACB unit). Each ACBU consists of a plurality of packs. Each pack is 2,048 bytes. Each ACBU comprises an A-CONT (i.e., audio control) pack positioned at a head thereof. This A-CONT is a counterpart of the CONT pack of the VCBU. A plurality of A (i.e., audio) packs, as well as V (i.e., video) and SP (i.e., sub picture) packs if necessary, succeed the A-CONT pack. Fig. 7 shows a detailed arrangement of the ACBU. The A-CONT pack includes administration information, such as TOC (i.e., table of [contens] contents) information, for [administrating] administration of audio signals of the succeeding "A" packs. The

user data area of each "A" pack stores various audio data including original musical compositions as well as the bonus information or group information, such as taped accompaniments and BGM sounds.

IN THE CLAIMS:

1. (Amended) A method for recording and reproducing audio-related data to or from a digital video disc, comprising the steps of:

transmitting at least one primary musical composition via a digital video disc, together with bonus information [relating to said] comprising secondary musical composition and an approved interactive data required when a user accesses said bonus information;

receiving an arbitrary interactive data entered by the user accessing said bonus information; and

reproducing the transmitted primary musical composition regardless of said entered interactive data, and allowing a reproduction of said bonus information including said secondary musical composition only when said entered interactive data agrees with said approved interactive data.

2. (Amended) The recording and reproducing method in accordance with claim 1, wherein said primary musical composition is a main source to be recorded on or reproduced from the digital video disc, and at least one optional source is selectable from the group consisting of taped accompaniments, BGM sounds, MIDI codes, and inquiries.

6. (Amended) An encoding apparatus for a digital video disc comprising:
an A/D conversion means for converting audio analog signals of at least one primary musical composition into a digital form and producing a digital data stream; and

a recording means for recording said digital data stream on a digital video disc together with bonus information [relating to said] comprising a secondary musical composition and an approved interactive data required when a user accesses said bonus information.

7. (Amended) The encoding apparatus in accordance with claim 6, wherein said primary musical composition is a main source to be recorded on the digital video disc, and at least one optional source is selectable from the group consisting of taped accompaniments, BGM sounds, MIDI codes, and inquiry.

16. (Amended) A decoding apparatus for a digital video disc which stores a digital data stream obtained by A/D converting audio analog signals of at least one primary musical composition, bonus information [relating to said] comprising a secondary musical composition, and an approved interactive data required when a user accesses said bonus information, said decoding apparatus comprising:

an input means for receiving an arbitrary interactive data entered by the user accessing said bonus information; and

a reproducing means for reproducing said primary musical composition regardless of said entered interactive data, and allowing a reproduction of said bonus information including said secondary musical composition only when said entered interactive data agrees with said approved interactive data.

17. (Amended) The decoding apparatus in accordance with claim 16, wherein said primary musical composition is a main source to be reproduced from the digital video disc, and at least one optional source is selectable from the group consisting of taped accompaniments, BGM sounds, MIDI codes, and inquiries.

21. (Amended) A method for recording and reproducing audio-related data to and from a digital video disc comprising the steps of:

transmitting at least one musical composition via a digital video disc, together with [a program] reproduction control data for selectively reproducing one of musical composition groups and an approved interactive data required when a user accesses a specific musical composition group;

receiving an arbitrary interactive data entered by the user accessing said specific musical composition group; and

allowing a reproduction of said specific musical composition group only when said entered interactive data agrees with said approved interactive data.

25. (Amended) An encoding apparatus for a digital video disc comprising:

an A/D converter for converting audio analog signals of at least one primary musical composition into a digital form by sampling said audio analog signals at a predetermined sampling frequency and producing a digital data stream;

a signal processing circuit for processing said digital data stream to produce a user data pack;

an encoding circuit for receiving said user data pack together with bonus information [relating to said] comprising a secondary musical composition and an approved interactive data required when a user accesses said bonus information, and producing audio and video data; and

a modulating circuit for modulating said audio and video data according to a modulation procedure suitable for the type of a digital video disc on which said audio and video data are recorded.

26. (Amended) The encoding apparatus in accordance with claim 25, wherein said encoding circuit produces packing data of said primary musical composition as a main source to be recorded on said digital video disc, as well as packing data of at least

one optional source selected from the group consisting of taped accompaniments, BGM sounds, MIDI codes, and inquiries.

27. (Amended) The encoding apparatus in accordance with claim 25, wherein said bonus information [is] comprises a program for reproducing one of musical composition groups and said approved interactive data is required when the user accesses a specific musical composition group.

31. (Amended) A decoding apparatus for a digital video disc which stores a digital data stream obtained by A/D converting audio analog signals of at least one primary musical composition, bonus information [relating to said] comprising a secondary musical composition, and an approved interactive data required when a user accesses said bonus information, said decoding apparatus comprising:

a judging means for judging whether or not an arbitrary interactive data entered by the user agrees with said approved interactive data;

a modulation circuit for demodulating received signals in compliance with a demodulation procedure suitable for the digital video disc;

a decoding circuit for separating said demodulated signal into audio and video packing data of said primary musical composition and said bonus information;

a reproduction control means for reproducing audio and video data of said primary musical composition from said decoding circuit regardless of said entered interactive data and for allowing a reproduction of said bonus information including said secondary musical composition in response to a judgement result of said judging means only when said entered interactive data agrees with said approved interactive data.

32. (Amended) The decoding apparatus in accordance with claim 31, wherein said decoding circuit produces packing data of said primary musical composition as a main source to be reproduced from said digital video disc, as well as packing data of at least one optional source selected from the group consisting of taped accompaniments, BGM sounds, MDI codes, and inquiries.

33. (Amended) The decoding apparatus in accordance with claim 31, wherein said bonus information [is a program for reproducing] comprises one of musical composition groups and said approved interactive data is required when the user accesses a specific musical composition group.